1963 LRQ Case File

JOINT MESSAGEFORM

SECURITY CLASSIFICATION [redacted]

SPACE BELOW RESERVED FOR COMMUNICATION CENTER

CLASSIFICATION CHANGED TO [redacted] L 1X

By authority of AFR 205-2 Cy #3 of 5

Signature of Originator

PRECEDENCE Date 12 APR 1963 Time

ACTION / INFO	ROUTINE	MULTI	SINGLE	ACCOUNTING SYMBOL	ORIG. OR REFERS TO	CLASSIFICATION OF REFERENCE

FROM:
6595 TH AEROSPACE TEST WG, VANDENBERG AFB, CALIF.

SPECIAL INSTRUCTIONS

TO: SPACE SYSTEMS DIV LOSA CALIF.
VW ZD-7-1-5

SUBJECT: 8-HOUR FLASH REPORT

I. SUMMARY

A VEHICLE CONSISTING OF SLV-2 BOOSTER NO. 369 AND S-01A ORBITAL STAGE NO. 1157 WAS LAUNCHED ON THE FIRST ATTEMPT FROM VAFB COMPLEX 75-1, PAD 1, AT 1309:49.06 PST ON 7 JANUARY 1963. THE PRIMARY LAUNCH OBJECTIVE, TO PLACE THE S-01A SATELLITE WITH PAYLOAD IN A NEAR-POLAR ORBIT, WAS ACCOMPLISHED. INJECTION CONDITIONS FROM THE VTS RADAR PLOTBOARD WERE NOT AVAILABLE DUE TO RADAR FADE APPROXIMATELY 25 SEC BEFORE S-01A ENGINE CUTOFF, HOWEVER UP TO THE TIME OF RADAR LOSS, THE ASCENT TRAJECTORY CLOSELY FOLLOWED THE PREPDOT. THE ORBITAL PERIOD ATTAINED APPEARS TO BE NEAR-NOMINAL, BASED ON FIRST PASS ACQUISITION.

DOWNGRADE AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10

DATE	TIME
7	0220Z
MONTH	YEAR
JAN	63

WRITER

SYMBOL

TYPED NAME AND TITLE (Signature, if required)
C. S. WALLER, LT. COL., USAF

PHONE 866-5831 | PAGE NR. 1 | NR. OF PAGES

SECURITY CLASSIFICATION [redacted]

RELEASER

SIGNATURE

TYPED (or stamped) NAME AND TITLE

DD FORM 1 MAY 58 173 REPLACES DD FORM 173, 1 OCT 49, WHICH WILL BE USED UNTIL EXHAUSTED

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II. SIGNIFICANT EVENTS

PRELIMINARY VALUES OF SIGNIFICANT LAUNCH EVENTS ARE:

LIFTOFF (1308/49.06 PST)	ZERO
STEERING INITIATED	92.31 SEC
MECO (S1)	149.39 SEC
VECO	158.37 SEC
ENABLE D1 AND D2 (S2)	154.41 SEC
D1 ON	157.13 SEC
D1 OFF	158.50 SEC
D2 ON	158.69 SEC
D2 OFF	163.62 SEC
SEPARATION COMMAND (S3)	164.17 SEC
SEPARATION COMPLETE	166.4 SEC
ULLAGE ROCKET IGNITION	184.64 SEC
S-01A ENGINE IGNITION	194.64 SEC
S-01A THRUST ATTAINMENT (90 PER CENT PC)	198.78 SEC
S-01A BURNOUT (70 PER CENT PC)	437.28 SEC
S-01A LINK 2 TELEMETRY FADE	484 SEC
VTS VERLORT RADAR FADE	412 SEC
VTS ACQUISITION BEACON FADE	467 SEC
VTS TELEMETRY DATA FADE (LINK 1)	476 SEC

6593 TH AEROSPACE TEST WG [redacted]

III. SLV-2 PERFORMANCE

ALL BOOSTER SUB-SYSTEMS PERFORMED SATISFACTORILY, AND IN RESPONSE TO GROUND GUIDANCE SYSTEM COMMANDS PROVIDED THE REQUIRED COAST APOGEE CONDITIONS.

GROUND GUIDANCE SYSTEM DATA INDICATE THAT BOOSTER COAST APOGEE ALTITUDE WAS 106.95 NM (NOMINAL: 106.91 NM) AND THE VELOCITY WAS 9956 FPS (NOMINAL: 9967 FPS).

IV. S-01A PERFORMANCE

ALL S-01A VEHICLE SYS- SYSTEMS PERFORMED SATISFACTORILY DURING LAUNCH TO PROVIDE ADEQUATE TRAJECTORY CONDITIONS FOR ORBITAL INJECTION AT ENGINE SHUTDOWN.

AT THE TIME OF SIGNAL FADE AT VTS, ALL VEHICLE SUB-SYSTEMS WERE FUNCTIONING NORMALLY, AND THE ORBITAL TIMER WAS SET AT 5439 SEC (STEP 19) IN THE RESET-ON POSITION, IN THE INCREASE MODE, AND ALTERNATE RE-ENTRY DISARM STATE.

V. AEROSPACE GROUND EQUIPMENT

IN GENERAL, THE AEROSPACE GROUND EQUIPMENT PERFORMED SATISFACTORILY. DURING S-01 FUEL LOADING, UDMH LEAKED FROM A HARDLINE FITTING IN THE MAST FUEL SUPPLY LINE AT ONE DROP PER 5 SEC. INTERCONTAMINATION PROBLEM WAS ENCOUNTERED.

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[redacted]

VI. COUNTDOWN

THE VEHICLE WAS LAUNCHED ON THE FIRST COUNTDOWN ATTEMPT DURING THE SCHEDULED [redacted] "WINDOW". ONE TECHNICAL HOLD OF 4 MIN 48 SEC DURATION WAS IMPOSED DURING PHASE II (T-11 MIN) IN ORDER TO SEND PERSONNEL TO THE PAD TO ADJUST THE DAC ACE GAS SUPPLY PRESSURE REGULATOR. THE COUNTDOWN WAS RECYCLED TO START OF TERMINAL COUNTDOWN. IN ADDITION THE FOLLOWING PROBLEMS AND DELAYS WERE ENCOUNTERED:

1) TASK 2 WAS EXTENDED 84 MIN DUE TO PAYLOAD MECHANICAL MATING PROBLEMS.

2) THE TELEMETRY MEASUREMENT OF AGENA GUIDANCE GAS TEMPERATURE (D70) WAS INOPERATIVE DURING THE COUNTDOWN AND LAUNCH.

3) A SMALL FUEL LEAK OCCURRED IN THE LMSC MAST PLUMBING DURING THE PROPELLANT LOADING OPERATION AND CAUSED AN INDICATION ON LEAK DETECTOR MONITORS.

VII. PAD DAMAGE

PAD DAMAGE WAS NORMAL AND THE RECOVERY SCHEDULE CAN BE MAINTAINED.

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